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Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte TAKASHI HIRAKAWA and HIROYUKI YOSHINE

Appeal No. 2003-1567
Application No. 09/417,714

ON BRIEF[1]

Before FLEMING, BARRY, and SAADAT, *Administrative Patent Judges*.
BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

A patent examiner rejected claims 1-10. The appellants appeal therefrom under 35 U.S.C. § 134(a). We affirm.

BACKGROUND

The invention at issue on appeal relates to a three-panel, liquid-crystal display ("LCD") projector. Figure 10 of the appellants' specification shows a LCD projector employing three LCD panels 1R, 1G, and 1B as optical shutters. A high-intensity white

[1]Neither the appellants nor a representative therefor appeared for an oral hearing on January 20, 2004. Accordingly, the hearing is waived.

light is separated into red, green, and blue light rays. Receiving the red, green, and blue light rays, the respective panels output a red video image, a green video image, and a blue video image. A dichroic prism 2 synthesizes the red, green, and blue video images. The synthesized image is projected onto a screen 4 via a lens 3, thereby producing an enlarged color image. According to the appellants, non-uniformity in light transmissivity in the LCD panels, the dichroic prism, and the lens causes non-uniformity in the chrominance of the enlarged color image. (Spec. at 1.)

Accordingly, the appellants' invention supplies a primary color video signal and a common voltage to a LCD panel. By superimposing a correction signal for canceling chrominance non-uniformity on the primary color video signal, the invention removes the non-uniformity. An enlarged color image having good uniformity is thus displayed. (*Id.* at 3.)

A further understanding of the invention can be achieved by reading the following claim.

1. A liquid-crystal display apparatus comprising:

a liquid-crystal display panel;

means for supplying a primary color video signal, wherein a correction signal for canceling chrominance non-uniformity is superimposed on the primary color video signal; and

means for supplying a common voltage.

Claim 1 stands rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,260,797 ("Muraji"). Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as obvious over Muraji and U.S. Patent No. 6,067,128 ("Imai").

OPINION

Our opinion addresses the rejections in the following order:

- anticipation rejection of claim 1
- obviousness rejection of claims 1-10.

A. ANTICIPATION REJECTION OF CLAIM 1

Rather than reiterate the positions of the examiner or the appellants *in toto*, we address the point of contention therebetween. The examiner finds, "Muraji et al teach an LCD display apparatus for canceling chrominance (color) non-uniformity by superimposing a correction signal to a primary color (R, G, B) (see figures 6, 7 and abstract), which is similar to the appellants' invention for removing non-uniformity chrominance by superimposing a correction signal on the R, G, B signals (see claim 1)." (Examiner's Answer at 4.) The appellants argue, "[a]t no point in Muraji et al. '797 is it disclosed, taught or suggested . . . that an apparatus that corrects for luminance

nonuniformity can be used to correct for chrominance nonuniformity, or that the apparatus of Muraji et al. '797 can be used to correct for chrominance nonuniformity." (Reply Br. at 2.) In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the representative claim to determine its scope. Second, we determine whether the construed claim is anticipated.

1. Claim Construction

"Analysis begins with a key legal question -- *what* is the invention *claimed*?" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). In answering the question, "the Board must give claims their broadest reasonable construction. . . ." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1668 (Fed. Cir. 2000). "Moreover, limitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)).

Here, claim 1 recites in pertinent part the following limitations: "a correction signal for canceling chrominance non-uniformity. . . . " Giving the claim its broadest, reasonable construction, the limitations require canceling chrominance non-uniformity.

2. Anticipation Determination

"Having construed the claim limitations at issue, we now compare the claims to the prior art to determine if the prior art anticipates those claims." *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349, 64 USPQ2d 1202, 1206 (Fed. Cir. 2002). "[A]nticipation is a question of fact." *Hyatt*, 211 F.3d at 1371, 54 USPQ2d at 1667 (citing *Bischoff v. Wethered*, 76 U.S. (9 Wall.) 812, 814-15 (1869); *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997)). "A claim is anticipated . . . if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (citing *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 715, 223 USPQ 1264, 1270 (Fed. Cir. 1984); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983); *Kalman v. Kimberly-Clark Corp.*, 713 F.2d760, 771, 218 USPQ 781, 789 (Fed. Cir. 1983)).

Here, Muraji "relates to a projection type image display apparatus using a light modulation image display device including a liquid crystal display device. . . ." Col. 1, ll. 8-10. As stated in the Summary of the Invention, to which the appellants refer, (Reply Br. at 2), "[i]t is hence a primary object of [Muraji's] invention to present a projection type image display apparatus capable of **displaying an image uniform in**

brightness and **color** even in peripheral parts on a projected screen." Col. 2, ll. 11-14 (emphasis added). To display an image uniform in color, we find that the reference cancels chrominance non-uniformity. To wit, "by correcting the amplitude of video signals in consideration of the dimming characteristics of projection lenses, an image free from uneven color can be displayed on the projection screen." Col. 7, ll. 48-51. More specifically, "by sequentially correcting the signal voltages for driving the image display devices 59 and 61 in the vertical direction, a projected image free from unevenness of color can be obtained on the whole screen." Col. 6, ll. 62-66. Therefore, we affirm the anticipation rejection of claim 1.

B. OBVIOUSNESS REJECTION OF CLAIMS 1-10

"[T]o assure separate review by the Board of individual claims within each group of claims subject to a common ground of rejection, an appellant's brief to the Board must contain a clear statement for each rejection: (a) asserting that the patentability of claims within the group of claims subject to this rejection do not stand or fall together, and (b) identifying which individual claim or claims within the group are separately patentable and the reasons why the examiner's rejection should not be sustained." *In re McDaniel*, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002) (citing 37 C.F.R. §1.192(c)(7) (2001)). "Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable." 37 C.F.R.

§ 1.192(c)(7) (2002). "If the brief fails to meet either requirement, the Board is free to select a single claim from each group of claims subject to a common ground of rejection as representative of all claims in that group and to decide the appeal of that rejection based solely on the selected representative claim." *McDaniel*, 293 F.3d at 1383, 63 USPQ2d at 1465.

Here, the appellants argue "claim[s] 1-4 and 7" as a group. (Appeal Br. at 8-13.) They also stipulate that "[c]laims 3 and 5 stand or fall together," (*id.* at 5); "[c]laims 4 and 6 stand or fall together," (*id.*); and "[c]laims 7 and 10 stand or fall together. . . ." (*Id.*) Although the appellants point out differences in what claims 8 and 9 cover, (*id.* at 14), this is not an argument as to why the claims are separately patentable. Therefore, claims 2-10 stand or fall with representative claim 1.

With this representation in mind, we address the point of contention between the examiner and the appellants. As aforementioned, the examiner finds, "Muraji et al teach an LCD display apparatus for canceling chrominance (color) non-uniformity by superimposing a correction signal to a primary color (R, G, B) (see figures 6, 7 and abstract), which is similar to the appellants' invention for removing non-uniformity chrominance by superimposing a correction signal on the R, G, B signals (see claim 1)." (Examiner's Answer at 4.) As also aforementioned, the appellants argue, "[a]t no

point in Muraji et al. '797 is it disclosed, taught or suggested . . . that an apparatus that corrects for luminance nonuniformity can be used to correct for chrominance nonuniformity, or that the apparatus of Muraji et al. '797 can be used to correct for chrominance nonuniformity." (Reply Br. at 2.)

In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the representative claim to determine its scope. Second, we determine whether the construed claim would have been obvious.

1. Claim Construction

As aforementioned, claim 1 requires canceling chrominance non-uniformity.

2. Obviousness Determination

Having determined what subject matter is being claimed, the next inquiry is whether the subject matter would have been obvious. The question of obviousness is "based on underlying factual determinations including . . . what th[e] prior art teaches explicitly and inherently. . . ." *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697(Fed. Cir. 2001) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966); *In re Dembiczak*, 175 F.3d 994, 998, 50 USPQ 1614, 1616 (Fed. Cir. 1999); *In re Napier*, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995)). "'A

prima facie case of obviousness is established when the teachings from the prior art itself would . . . have suggested the claimed subject matter to a person of ordinary skill in the art.'" *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, we found that Muraji cancels chrominance non-uniformity as aforementioned. Therefore, we affirm the obviousness rejection of claim 1 and of claims 2-10, which fall therewith.

CONCLUSION

In summary, the rejection of claim 1 under § 102(b) is affirmed. The rejection of claims 1-10 under § 103(a) is also affirmed. "Any arguments or authorities not included in the brief will be refused consideration by the Board of Patent Appeals and Interferences. . . ." 37 C.F.R. § 1.192(a). Accordingly, our affirmance is based only on the arguments made in the briefs. Any arguments or authorities not included therein are neither before us nor at issue but are considered waived. No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

MICHAEL R. FLEMING
Administrative Patent Judge

LANCE LEONARD BARRY
Administrative Patent Judge

MAHSHID D. SAADAT
Administrative Patent Judge

) BOARD OF PATENT
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